

**SYSTEM AND METHOD FOR
GENERATING A SCHEDULE BASED
ON RESOURCE ASSIGNMENTS**

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ABSTRACT OF THE DISCLOSURE

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A system for generating a schedule by generating assignments for the tasks of a project and sequentially scheduling the individual assignments to available resources. First, input information is received which includes a resource calendar and a task list. A resource calendar identifies the resources available to work on a project and any constraints that are associated with the resources. A task list identifies the tasks that must be performed and any constraints that are associated with the tasks. At a minimum, the constraints associated with the tasks must identify each of the resources assigned to the task, and the work-amount that each resource must perform. Next, assignments are generated for each of the tasks. Each of the assignments identifies a specific resource and the work-amount required by the specific resource. Finally, each of the assignments are scheduled in accordance with the provided resource constraints identified in the resource calendar. The resulting schedule maximizes the utilization of the resources by scheduling on an assignment basis. The assignments are individually scheduled into the next available time-slot of the resources, thus, eliminating idle time where a resource is under-utilized.